PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	Examiner: C. Sadaat
Stallman et al.	Group Art Unit: 3713
Appl. No.: 09/505,678	
Filed: February 17, 2000	Atty. Dkt. No.: 2135.650
For: INFANTRY WEARABLE COMPUTER AND WEAPON SYSTEM	

Commissioner for Patents
Washington, D.C. 20231

Sir:

Declaration under 37 C.F.R. 1.131

I, Andrew Dobson declare:

1. I am the co-inventor of one or more claims of the above-identified patent application relating, in part, to a cursor control mechanism having a particularly advantageous functionality. I have assigned my rights to this patent application to my employer, Exponent Failure Analysis, Inc. (hereinafter Exponent), a U.S. corporation having its headquarters in Menlo Park, California, which is involved in the development of various military technologies.

2. At least prior to August 3, 1999, and approximately during June 1999, I conceived of and reduced to practice, by acts occurring within the borders of the United States of America, a cursor control mechanism located on the backward facing portion of a weapon grip. Furthermore,

during the time period which elapsed between the reduction to practice of the subject cursor control mechanism and the subsequent filing of the instant patent application, I did not abandon, suppress, or conceal the invention described herein.

3. More specifically, during approximately February of 1999, Exponent entered into a contract with The United States Army under which Exponent was to design, for military use, a wearable, computer integrated, weapon system which would enable ground soldiers to be more combat effective. In order to fulfill this objective, a group of Exponent engineers was assigned to the contract project, each engineer being allocated a specific set of tasks or design goals (six of which are named inventors on the subject patent application). Most relevantly, because the weapon system was to employ a computer component (which required a means for human interface), it was decided that both new and old cursor control mechanisms should be explored so that a computer control mechanism could be implemented which fulfilled the unique and rigorous needs of a combat bound soldier. Approximately during June 1999, I was assigned such duty.

During my extensive experimentations with cursor control mechanisms, I tested various known and previously unknown devices as well as experimented with different mounting locations for the control mechanisms. During this exhaustive testing, I noted the various drawbacks of both the control mechanisms themselves and the locations of their employment. Using this knowledge, at least as early as June 1999, I conceived of the idea of and thereafter immediately constructed a cursor control device of the

"joystick" or "eraser head" type which was located at the back center portion of the weapon grip. Upon testing this design, it was immediately noticed that the device allowed for ambidextrous use (i.e. both right and left handed users could access the mechanism without modification or adjustment) and, more importantly, allowed the user to keep his/her trigger finger on the trigger while simultaneously controlling a cursor. Because of these distinct and unique advantages, a cursor control mechanism based on these design principles was successfully implemented into at least one prototype of the weapon system and was subsequently demonstrated to and tested by various military personnel.

4. All of the above described activities, including both the conception of the cursor control location and its subsequent actual reduction to practice, occurred in the United States, and more particularly, in the laboratories of Exponent's Phoenix facilities. Documentation which evidences that such work was performed during my employment at Exponent's Phoenix offices is enclosed herewith in the form of detailed time sheets labeled as Exhibit A. Each such time sheet lists the date of work activities and provides a brief description of the type of work performed e.g. "development of alternative pointing devices". Furthermore, copies of invention disclosure forms provided to Exponent's patent counsel, the law firm of *Hall, Priddy, Myers, and Vande Sande*, have been attached herewith as Exhibit B, such forms describing a reduction to practice of the subject cursor control mechanism and its inventive location in June 1999.

5. During the time period between the reduction to practice of the subject cursor control device and the filing of the instant patent application referenced above, I did not abandon, suppress, or conceal the subject invention.

In this regard, during the period between June 1999 and February 17, 2000 (the filing date of the instant application), at least one prototype of the subject weapon system, employing a cursor control device as designed and located as described above, was demonstrated during approximately weekly demonstrations to various military personnel.

Furthermore, at least as early as December 1999, management at Exponent instructed Exponent's patent counsel to begin preparation of a patent application encompassing the cursor control mechanism discussed herein. Thereafter, various engineers from Exponent worked in concert with Exponent's patent attorneys during the preparation of the application up and until the filing date of February 17, 2000.

6. The undersigned, being hereby warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of any patent resulting from the above identified application and that all statements made herein of our own knowledge are true and that all statements made on

information and belief are believed to be true.

Andrew Dobson

Andrew Dobson
Inventor
Date: 3/4/2003